Sanitized Copy Approved for Release 2011/02/04 : CIA-RDP80-00809A000600010098-9 -CLASSIFICATION LUFF SECRET/SECURITY INFORMATION-50X1-HUM CENTRAL INTELLIGENCE AGENCY REPORT INFORMATION REPORT Hungary/USSR DATE DISTR. /5 Nov 51 COUNTRY NO. OF PAGES Soviet Aircraft Engines **SUBJECT** NO. OF ENCLS. PLACE ACQUIRED 50X1-HUM SUPPLEMENT TO REPORT NO. DATE ACQUIRED DATE OF THIS IS UNEVALUATED INFORMATION

take-off, se of M ll D and M ll K engi	a level maximum and cruising powers with rpm	50X ²
1 11 D Engines Take-off maximum hp: 125 Take-off maximum rpm: 16 Sea level maximum hp: no Truising hp: 80 Cruising rpm: 1200 Ratio of propeller to cra	Take-off maximum rpm: 1800 t known Sea level maximum hp: not kno Cruising hp: 120 Cruising rpm: 1200	о wn 50X1-
		. •
types of lubricating	ng oils are used with these engines	
In spring and fall: MK In winter: MZS type In summer: MS type		s 50X [^]
In spring and fall: MK In winter: MZS type In summer: MS type type, d	M 11 K Engines Type: VISH; Soviet manufactur Propeller blades: wood Number of blades: two	50X°
In spring and fall: MK In winter: MZS type In summer: MS type In summer: MS type type, difficulty type, difficulty type; dif	M 11 K Engines M 11 K Engines Type: VISH; Soviet manufactu: Propeller blades: wood Number of blades: two Diametef: 1.80 m; automatic constant speed pitch co	50X°

DRM NO. 51-40

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~ 2 ~ The ratio is 62:6 the type, dismeter and number of blades of the propeller? 50X1-HUM Type: VISH Diameter: 3.20 m Propeller blades: metal Number of blades: three Pitch control: automatic, constant speed; oil pressure, R-7 type; oil pressure increased to 23 kg/cm2 from 6 kg/cm2 in order to 50X1-HUM change pitch. 8. types of lubricating oils are used In spring and fall: MK type In winter: MZS type In summer: MS type 9 20 11 the following information on the VK-105 Acro engine. Take-off: 1300 Mormal climb (in both supercharge gears): 1300 (in let gear at 3000 m altitude); 1000 (in 2nd gear at 4500 m altitude)
Meximum cruising power: 1000
Combat power: 1300 Ratio: 2 (crankshaft) to 1 (propeller)
Take-off: 2600 (crankshaft)
Sormal climb: 2600 (lst gear); 2300 (2nd gear)
Maximum cruising power: 2000 (crankshaft)
Combat power: 2600 (crankshaft) Height for given power: 3000 m altitude - 1300 hp 4500 m altitude - 1000 hp Boost Pressure Take-off: 1100 Hg mm Mormal climb: 1000 Mg mm (in both supercharge gears) Maximum cruising powers 900 Hg mm Combat powers 1100 Hg mm Fuel consumption
Take-off: 230 gr per hp per hour
Mormal climbs not known Maximum oruising power: 210 gr per hp per hour Compat powers probably 230 gr per hp per hour

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m 2 m The ratio is 62:6 the type, diameter and number of blades of the propeller 7. type of pitch control is employed Type: VISE Diameter: 3.20 m Propeller blades: metal Number of blades: three Pitch control: automatic, constant speed; oil pressure, 2-7 type; oil pressure increased to 23 kg/m² from 6 kg/cm² in order to change pitch. 8. types of lubricating oils are used In spring and fall: MK type In winter: MZS type In summer: MS type 9. 10. 11. the following information on the VK-105 Aero engine. Take-off: 1300 Normal climb (in both supercharge gears): 1300 (in let geer at 3000 m altitude); 1000 (in 2nd gear at 4500 m altitude) Maximum cruising powers 1000 Combat powers 1300 Ratio: 2 (crankshaft) to 1 (propeller) Take-off: 2600 (crankshaft) Normal climb: 2600 (1st gear); 2300 (2nd gear)
Maximum cruising power: 2000 (crankshaft)
Combat power: 2600 (crankshaft) Height for given power: 3000 m altitude - 1300 hp 4500 m altitude - 1000 hp Poost Pressure Take-off: 1100 Hg ma Normal climb: 1000 Hg mm (in both supercharge gears) Maximum cruising power: 900 Hg mm Combat power: 1100 Hg mm Fuel consumption
Take-off: 230 gr per hp per hour
Normal climb: not known Maximum cruising powers 210 gr per hp per hour Combat powers oscibably 230 gr per hp per hour

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	types of propellers are fitted to these engines
	-105 Aero Engine
	opeller type: VISH-105
	ades: three; metal
7)	tch control: automatic, constant speed; oil pressure, R-7 type. K-105 engines are equipped with six carburetors, one for two linders)
	the VK-107. It was used in the YAK-9 and
tì	e PE-2.
	The compressor to grankshaft rom
re	The compressor to crankshaft rpm
e	tio was 62:6 in 1st gear, 85:8 in 2nd gear. The compressor was uipped with a Polikhovsky automatic air intake control valve. The
ec ge	tio was 62:6 in 1st gear, 85:8 in 2nd gear. The compressor was uipped with a Polikhovsky automatic air intake control valve. The merator was 550 watts, 24 volts. The magnetoes were BSM type. This
er er	tio was 62:6 in 1st gear, 85:8 in 2nd gear. The compressor was uipped with a Polikhovsky automatic air intake control valve. The merator was 550 watts, 24 volts. The magnetoes were BSM type. This gine had six carburetors, one for every two cylinders.
er er	tio was 62:6 in 1st gear, 85:8 in 2nd gear. The compressor was uipped with a Polikhovsky automatic air intake control valve. The merator was 550 watts, 24 volts. The magnetoes were BSM type. This
er er th	tio was 62:6 in 1st gear, 85:8 in 2nd gear. The compressor was suipped with a Polikhovsky automatic air intake control valve. The merator was 550 watts, 24 volts. The magnetoes were BSM type. This gine had six carburetors, one for every two cylinders. The following information on the performance of the VK-107 engine.
er er th	tio was 62:6 in 1st gear, 85:8 in 2nd gear. The compressor was suipped with a Polikhovsky automatic air intake control valve. The merator was 550 watts, 24 volts. The magnetoes were BSM type. This gine had six carburetors, one for every two cylinders. The following information on the performance of the VK-107 engine.
ec er th	tio was 62:6 in 1st gear, 85:8 in 2nd gear. The compressor was suipped with a Polikhovsky automatic air intake control valve. The merator was 550 watts, 24 volts. The magnetoes were BSM type. This gine had six carburetors, one for every two cylinders. The following information on the performance of the VK-107 engine. 20 21 22 23 24 250 at 5500 m altitude with compressor in 1st gear at 3100 rpm

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